

REMARKS

Claims 1-35 are pending in the present application. Claims 1-35 have been examined and are rejected. In the above amendments, claims 1, 3, 4, 7-12, 14, 15, 17-23, 30, 31 and 35 have been amended. Therefore, after entry of the above amendments, claims 1-35 will be pending in this application. Applicant believes that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

Rejection of Claims 1, 2, 7, 10-15, 18-22 and 32-35 Under 35 U.S.C. §103(a)

Claims 1, 2, 7, 10-15, 18-22 and 32-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* (U.S. Patent No. 5,854,785) in view of Lee *et al* (U.S. 2003/0174677A1) and further in view of Wang *et al* (U.S. Patent No. 6,178,164).

Claim 1 of the present invention, as amended, recites:

“A device in a wireless communication system, comprising:
a reselection unit operative to provide an indication to perform cell reselection from a first base station to a second base station;
a control unit operative to initiate a cell reselection procedure for the second base station in response to the indication from the reselection unit, wherein the first base station is a current serving cell and the cell reselection procedure selects the second base station as a new serving cell; and
a monitoring unit operative to receive from a broadcast channel of the second base station sufficient system information to process a paging channel of the second base station, to determine which particular time intervals are assigned to the device for the paging channel based on the sufficient system information, to start monitoring the paging channel upon reception of the sufficient system information from the second base station and prior to completion of the cell reselection procedure, and to monitor the paging channel during the time intervals assigned to the device to detect for paging messages sent by the second base station to the device.”

Applicant submits that claim 1 is patentable over Willey in view of Lee and Wang for at least the following reasons.

First, the combination of Willey, Lee and Wang does not disclose “a monitoring unit operative to receive from a broadcast channel of the second base station sufficient system

information to process a paging channel of the second base station,” as recited in claim 1.

Claim 1 thus recites receiving system information from one channel (a broadcast channel), with the system information being used to process another channel (a paging channel). The rejection indicates that Willey fails to disclose this feature of claim 1. The rejection states that Lee discloses this feature in paragraphs 0043 to 0048.

In Willey, a wireless device (i) measures neighbor pilot strengths, (ii) sends an initial access probe with the identities of the base stations corresponding to the measured neighbor pilot strengths, and (iii) begins monitoring the paging channels of the active pilot and at least one neighboring pilot indicated by the identities. (See column 3, lines 51-67.) The wireless device does not receive a broadcast channel and further does not receive sufficient system information from the broadcast channel to process a paging channel.

In Lee, a mobile station receives an overhead message of a paging channel transmitted from a neighbor base station B. Lee does not disclose receiving sufficient system information from a broadcast channel for processing a paging channel. Rather, the mobile station already has information to process the paging channel. Paragraph [0045] describes the overhead message being an ESPM message that indicates whether a Broadcast Control Channel is supported. Lee thus describes receiving information from a paging channel for possibly processing a broadcast channel, which is opposite of what is recited in claim 1.

Second, the combination of Willey, Lee and Wang does not disclose “determine which particular time intervals are assigned to the device for the paging channel based on the sufficient system information,” as recited in claim 1. The rejection states that the combination of Willey and Lee fails to disclose time intervals determined based on the sufficient system information. The rejection states that Wang discloses this feature in column 6, lines 35-56.

In column 6, lines 35-56, Wang discloses acquisition processing upon power-up of mobile station 2. (See column 6, line 8-9.) After detecting a pilot signal with energy above a predetermined threshold, mobile station 2 attempts acquisition of a synchronization channel to obtain timing information. Mobile station 2 then monitors a paging channel in accordance with the timing information and a predetermined format. (See column 6, lines 46-56.) The timing information disclosed by Wang presumably relates to frame and chip timing and does not convey “which particular time intervals are assigned to the device for the paging channel.” Hence, Applicant submits that Wang does not disclose this feature of claim 1.

Third, the combination of Willey, Lee and Wang does not disclose “start monitoring the paging channel upon reception of the sufficient system information from the second base station and prior to completion of the cell reselection procedure,” as recited in claim 1. The rejection indicates that Willey discloses this feature of claim 1. However, Willey does not disclose receiving sufficient system information to process a paging channel, as noted above. Hence, Willey does not disclose starting monitoring of the paging channel (i) upon reception of the sufficient system information (since Willey does not receive the information) and (ii) prior to completion of the cell reselection procedure to the second base station.

For at least the above reasons, Applicant submits that claim 1 is patentable over Willey in view of Lee and Wang. Claims 2 and 32-35 are dependent on claim 1 and are patentable over Willey in view of Lee and Wang for at least the reasons noted for base claim 1. Independent claims 7, 10 and 11 have each been amended to recite the features noted above for claim 1. These claims are also patentable over Willey in view of Lee and Wang for at least the reasons noted for claim 1.

Claim 12 of the present invention, as amended, recites:

“A device in a wireless communication system, comprising:
a reselection unit operative to provide an indication to perform cell reselection from a first base station to a second base station; and
a control unit operative to, in response to the indication from the reselection unit,
direct decoding of designated system information from a broadcast channel of the second base station,
use successful or unsuccessful decoding of the designated system information as reconfirmation of ability to decode a control channel of the second base station prior to performing cell reselection to the second base station,
if the designated system information from the second base station is decoded successfully, switch to the second base station and initiate a cell reselection procedure for the second base station, wherein the first base station is a current serving cell and the cell reselection procedure selects the second base station as a new serving cell, and

skip the cell reselection procedure if the designated system information is not decoded successfully.”

Applicant submits that claim 12 is patentable over Willey in view of Lee and Wang for at least the following reasons.

First, the combination of Willey, Lee and Wang does not disclose “direct decoding of designated system information from a broadcast channel of the second base station,” as recited in claim 12. Willey discloses a wireless device monitoring paging channels (and not a broadcast channel) in column 3, lines 51-67. The rejection states that Lee discloses this feature in paragraphs 0043 to 0048. However, Lee discloses a mobile station receiving the ECCLM and ESPM of a paging channel (and not a broadcast channel) in paragraphs 0043 to 0048.

Second, the combination of Willey, Lee and Wang does not disclose “use successful or unsuccessful decoding of the designated system information as reconfirmation of ability to decode a control channel of the second base station,” as recited in claim 12. This feature is disclosed in paragraphs [1009] and [1047] of the present application. The combination of Willey, Lee and Wang does not disclose using decoding status of one channel (a broadcast channel) to determine ability to decode another channel (a control channel), as recited in claim 12.

Third, the combination of Willey, Lee and Wang does not disclose “if the designated system information from the second base station is decoded successfully, switch to the second base station and initiate a cell reselection procedure for the second base station,” as recited in claim 12. The rejection indicates that Willey discloses this feature in column 3, lines 51-67. However, Willey does not disclose receiving designated system information from a broadcast channel, as noted above for claim 1. Furthermore, Willey does not disclose initiating cell reselection procedure conditioned upon successful decoding of the designated system information (since Willey does not even receive the information).

Fourth, the combination of Willey, Lee and Wang does not disclose “skip the cell reselection procedure if the designated system information is not decoded successfully,” as recited in claim 12. The rejection states that Wang discloses this feature in column 9, line 65 to column 10, line 38. However, this section of Wang discloses making measurements of a pilot channel and not reporting a base station if its pilot E_c/I_o is below a T_ADD level. Wang

thus uses measurements of a pilot channel to determine whether or not to report a base station. Wang does not use decoding result of a broadcast channel to determine whether to skip handover to a base station. Wang thus performs a different function (reporting) using a different channel (pilot channel) than the function (handover) and channel (broadcast channel) recited in claim 12.

For at least the above reasons, Applicant submits that claim 12 is patentable over Willey in view of Lee and Wang. Claims 13-15 are dependent on claim 12 and are patentable over Willey in view of Lee and Wang for at least the reasons noted for base claim 12. Independent claims 18 and 20 have each been amended to recite the features noted above for claim 12. Claim 19 is dependent on claim 18. Claims 21 and 22 are dependent on claim 20. Claims 18-22 are patentable over Willey in view of Lee and Wang for at least the reasons noted for claim 12.

Accordingly, the §103(a) rejection of claims 1, 2, 7, 10-15, 18-22, 32 and 33 should be withdrawn.

Rejection of Claims 23, 24, 26, 30 and 31 Under 35 U.S.C. §103(a)

Claims 23, 24, 26, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and Wang *et al* and further in view of Weaver, Jr *et al* (U.S. Patent No. 5,828,661).

Claim 23 of the present invention, as amended, recites:

“A device in a wireless communication system, comprising:
a reselection unit operative to provide an indication to perform cell reselection from a first base station to a second base station;
a control unit operative to initiate a cell reselection procedure for the second base station in response to the indication from the reselection unit, wherein the first base station is a current serving cell and the cell reselection procedure selects the second base station as a new serving cell; and
a monitoring unit operative to monitor a first paging channel of the first base station until a terminating event occurs at a time instant after the cell reselection procedure is initiated, to receive from a broadcast channel of the second base station sufficient system information to process a second paging channel of the second base station, to determine which time intervals are assigned to the device for the second

paging channel based on the sufficient system information, and to monitor the second paging channel upon receiving the sufficient system information from the second base station and during the time intervals assigned to the device, wherein the monitoring of the first paging channel and the monitoring of the second paging channel overlap in time.”

Applicant submits that claim 23 is patentable over Willey in view of Lee and Wang and further in view of Weaver for at least the following reasons.

First, the combination of Willey, Lee, Wang and Weaver does not disclose “receive from a broadcast channel of the second base station sufficient system information to process a second paging channel of the second base station,” as recited in claim 23 and discussed above for claim 1.

Second, the combination of Willey, Lee, Wang and Weaver does not disclose “determine which time intervals are assigned to the device for the second paging channel based on the sufficient system information,” as recited in claim 23 and also discussed above for claim 1.

Third, the combination of Willey, Lee, Wang and Weaver does not disclose “monitor the second paging channel upon receiving the sufficient system information from the second base station and during the time intervals assigned to the device,” as recited in claim 23.

For at least the above reasons, Applicant submits that claim 23 is patentable over Willey in view of Lee and Wang and further in view of Weaver. Claims 24 and 26 are dependent on claim 23 and are patentable for at least the reasons noted for base claim 23.

Independent claims 30 and 31 have each been amended to recite the features noted above for claim 23. These claims are thus patentable over Willey in view of Lee and Wang and further in view of Weaver for at least the reasons noted for claim 23.

Accordingly, the §103(a) rejection of claims 23, 24, 26, 30 and 31 should be withdrawn.

Rejection of Claims 3-6, 8, 9, 16, 17, 25 and 27-29 Under 35 U.S.C. §103(a)

Claims 3, 4, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and Wang *et al* and further in view of Hafiz (U.S. Patent No. 6,505,042).

Claims 5 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and Wang *et al* and further in view of Persson (U.S. Patent No. 5,557,704).

Claims 6 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee, Wang *et al*, and Persson and further in view of Alvesalo (U.S. Patent No. 5,384,824).

Claims 25 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee, Wang *et al*, and Weaver, Jr *et al* and further in view of Anderson *et al* (U.S. Patent No. 6,161,013).

Claim 28 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee, Wang *et al*, and Weaver, Jr *et al* and further in view of Persson (U.S. Patent No. 5,557,704).

Claim 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee, Wang *et al*, Weaver, Jr *et al*, and Persson and further in view of Alvesalo (U.S. Patent No. 5,384,824).

Claims 3-6 are dependent on claim 1. Claims 8 and 9 are dependent on claim 7, claims 16 and 17 are dependent on claim 12. Claims 25 and 27-29 are dependent on claim 23.

Applicant submits that the combination of Willey, Lee and Wang does not disclose all of the features of base claims 1, 7, 12 and 23, as discussed above. Hence, the combination of Willey, Lee and Wang is an insufficient basis for the §103(a) rejection of dependent claims 3-6, 8, 9, 16, 17, 25 and 27-29.

Accordingly, the §103(a) rejection of claims 3-6, 8, 9, 16, 17, 25 and 27-29 should be withdrawn.

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CONCLUSION

In light of the amendments contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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